

PUBLIC HEALTH REPORTS

VOL. 51

JANUARY 17, 1936

No. 3

CURRENT PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES¹

December 1-28, 1935

Meningococcus meningitis.—The relatively high incidence of meningococcus meningitis which has prevailed in the United States throughout the year was maintained during the current period. For the 4 weeks ended December 28 the number of cases reported was 436, as compared with 202, 172, 241, and 280 for the corresponding period in the years 1934, 1933, 1932, and 1931, respectively. For the country as a whole the incidence has been the highest since 1930. During two 4-week periods earlier in the year the incidence exceeded that for the corresponding periods in 1930, and the number of cases for the current period was about 15 percent in excess of the figure for this period in that year. At no time, however, has the incidence reached the high level of 1929.

Table 1 gives for each geographic area the number of cases reported in 4-week periods during the current year, with comparative data for the years 1934 and 1933. The table shows that all sections of the country have contributed to the high incidence of the current year. The sharpest rise during the 4 weeks ended December 28 over the preceding 4-week period was reported from the South Central sections. Of a total of 138 cases, as against 50 for the preceding period in those sections, Oklahoma reported 54, Texas 36, Kentucky 16, and Tennessee 12. The incidence was the highest in this area in the 7 years for which data are available. Several States contributed to the highest incidence in 7 years in the South Atlantic area also. In other regions the increases were more normal. The seasonal peak of meningitis is not usually reached until March or April; further increases therefore may be expected up until that time.

¹ From the Office of Statistical Investigations, U. S. Public Health Service. These summaries include only the eight important communicable diseases for which the Public Health Service receives weekly telegraphic reports from the State health officers. The numbers of States included for the various diseases are as follows: Typhoid fever, 48; poliomyelitis, 48; meningococcus meningitis, 48; smallpox, 48; measles, 47; diphtheria, 48; scarlet fever, 48; influenza, 44 States and New York City. The District of Columbia is counted as a State in these reports.

TABLE 1.—*Meningococcus meningitis* cases reported in each geographic area during 1935, 1934, and 1933

Geographic area and year	52 weeks	4-week period ended—									
		Apr. 20 ¹	May 18	June 15	July 13	Aug. 10	Sept. 7	Oct. 5	Nov. 2	Nov. 30	Dec. 28
All sections: ²											
1935.....	5,599	659	705	568	392	292	268	240	273	288	436
1934.....	2,303	249	220	178	134	130	129	135	135	129	202
1933.....	2,839	340	230	202	145	147	129	130	125	157	172
New England and Middle Atlantic:											
1935.....	1,171	127	155	136	109	87	66	96	62	59	69
1934.....	463	36	41	42	26	39	28	28	26	33	44
1933.....	590	72	39	44	34	48	45	27	25	39	38
East North Central:											
1935.....	1,305	189	195	128	92	67	57	35	57	59	78
1934.....	641	83	59	54	42	36	39	44	37	27	44
1933.....	877	115	89	79	51	30	28	29	32	41	45
West North Central:											
1935.....	630	75	83	62	27	30	26	17	33	32	41
1934.....	292	35	34	28	12	14	21	18	15	15	27
1933.....	345	40	34	25	13	16	12	9	6	17	18
South Atlantic:											
1935.....	1,045	108	150	121	77	48	66	30	59	49	69
1934.....	265	41	21	13	16	10	12	17	10	22	25
1933.....	327	30	17	16	15	16	15	26	23	27	33
East and West South Central:											
1935.....	911	101	68	63	49	32	29	41	35	50	138
1934.....	414	35	51	28	15	19	18	20	29	18	35
1933.....	443	56	35	21	20	25	14	27	22	20	19
Mountain and Pacific: ²											
1935.....	537	59	54	58	38	28	24	21	27	39	41
1934.....	228	19	14	13	23	12	11	8	18	14	27
1933.....	257	27	16	17	12	12	15	12	18	13	19

¹ See Public Health Reports for Oct. 25, 1935, p. 1437, for data for preceding 4-week periods.

² Nevada excluded; no data.

Poliomyelitis.—All sections of the country reported the usual seasonal decline of poliomyelitis during the current period, but the incidence was still considerably above the level of the corresponding period in each of the 3 preceding years. For the 4 weeks ended December 28 the number of cases reported totaled 232. In 1931 and 1930 the numbers for this period were 266 and 332, respectively. While each geographic area reported a decline from the preceding 4-week period, only the East North Central, Mountain, and Pacific areas reported fewer cases than at this time last year. In the New England and Middle Atlantic sections the number of cases (107) was almost seven times the figure for last year; in the West North Central the number (14) was double that for last year; while the South Atlantic region and the South Central regions reported increases of 70 and 50 percent, respectively.

Smallpox.—For the 4 weeks ended December 28 a total of 805 cases of smallpox was reported. The disease was still unusually prevalent in Nebraska (192 cases), Montana (140 cases), Washington State (121 cases), Colorado (53 cases), South Dakota (50 cases), and Kansas (41 cases). More than three-fourths of the total number of cases occurred in those States, which were mostly responsible for the highest incidence for the country as a whole since 1931. One case was

reported from the Middle Atlantic group of States (New York) and two cases were reported from the South Atlantic section. In the East North Central and South Central sections the incidence was the lowest in recent years.

Influenza.—The number of cases of influenza rose from about 3,500 for the preceding 4 weeks to approximately 5,500 for the current 4-week period. All sections of the country contributed to the increase, which, however, seemed to be about normal for this season of the year. Compared with preceding years the current incidence was about 60 percent of that for the corresponding period last year, but it was about 10 percent above the figure for the same period in 1933. In 1932 an epidemic was in progress in the West and South and 157,864 cases were reported for this period.

Typhoid fever.—The number of cases of typhoid fever reported for the 4 weeks ended December 28 was 752, as compared with 1,039, 995, and 680 for the corresponding period in the years 1934, 1933, and 1932, respectively. Each geographic area reported the lowest incidence since 1932, and in the New England, Middle Atlantic, and East North Central regions the incidence was the lowest in the 7 years for which data are available. Among the South Atlantic States the number (152 cases) was the lowest in 6 years. For the country as a whole typhoid fever has been less prevalent throughout the entire current year than in 1934.

Measles.—Reports indicate a normal seasonal increase of measles during the current 4-week period. The total number of reported cases was 10,802, as compared with 30,920 and 20,496 for the corresponding period in the years 1934 and 1933, respectively. During the year 1934 and the first half of the current year measles was unusually prevalent, but during recent weeks the disease declined rapidly and the current incidence compares more favorably with the more normal years of 1932, 1931, and 1930, when 13,942, 14,377, and 12,757 cases, respectively, were reported for this period. During the 1933-34 outbreak of measles the highest incidence was reported from the South Atlantic, South Central, Mountain, and Pacific sections, while in the 1934-35 outbreak the disease was most prevalent in the New England and Middle Atlantic and North Central sections. These sections were, however, not totally unaffected by the 1933-34 outbreak as the South Atlantic and South Central sections seem to have been by the current one. The incidence has been slightly above the expectancy in the Mountain and Pacific sections, the only regions where the current incidence exceeded that for the corresponding period of last year.

Scarlet fever.—The reported current incidence of scarlet fever was the highest for this period in the 7 years for which data are available. For the 4 weeks ended December 28 the reports show 24,405 cases.

In the West North Central section, where the disease has been unusually prevalent throughout the current year, the number of cases (4,323) was 2.4 times the figure for the corresponding period of last year, and in the Mountain and Pacific section, where the number of cases has also been considerably above the expectancy, the current incidence (4,004 cases) represented more than a 50-percent increase over the incidence at this time last year. The South Central area followed the level of last year very closely, as did also the East North Central and South Atlantic regions during the last half of the year. The New England and Middle Atlantic section reported about a 30-percent increase for the current period over the incidence of last year, but throughout the year the incidence has compared very favorably with that of last year.

Diphtheria.—The diphtheria incidence continued to follow the level of 1934 very closely. During the current 4-week period 3,861 cases were reported, as compared with 4,013 for the corresponding period last year. For this period in 1933 and 1932 the numbers of cases totaled 5,150 and 4,594, respectively. The New England and Middle Atlantic region reported a decrease of about 15 percent from the figure for the corresponding period of last year, but in other sections the incidence was about the same as last year.

Mortality, all causes.—The average mortality rate from all causes in large cities for the 4 weeks ended December 28, as reported by the Bureau of the Census, was 12.3 per 1,000 inhabitants (annual basis). The rates for the separate weeks of the period were 12.5, 12.3, 12.1, and 12.2, respectively. The rates for the first 2 weeks were considerably above those for the corresponding weeks in 1934 and the last 2 were slightly below those of last year, but the average rate for the period was approximately the same as that for the corresponding period in each of the 2 preceding years. During this period in 1932 a minor influenza epidemic was in progress and the rate was 13.4.

EFFECT OF CERTAIN BACTERIAL PRODUCTS UPON THE GROWTH OF MOUSE TUMOR

By I. C. Fogg, *Cytologist, United States Public Health Service, Office of Cancer Investigations, Harvard Medical School*

INTRODUCTION

It is well known that bacterial products are capable of modifying the growth of tumor. The regression, or complete recession, of tumors in subjects recovering from an attack of an acute infection, such as erysipelas, has been too frequently reported not to be significant. A number of investigators, too, such as Lassar, Spronck, Coley, Beebe

and Tracy, Uhlenhuth, Haendel and Steffenhagen, and Beck, have investigated the action of bacterial products upon malignant tumors either in laboratory animals or upon human subjects.

More recent reports have been made by Gratia and Linz (1931), by Shwartzman (1932), by Duran-Reynals, and by Apitz (1933). Because of their relation to the observations reported herewith they will be briefly described.

Gratia and Linz reported that when guinea pigs bearing a transplantable liposarcoma were intravenously injected with the filtered broth from a culture of *B. coli*, extensive and diffuse hemorrhages took place in the tumors. This observation was made in the course of a study of the so-called "Shwartzman reaction." Shwartzman, impressed by their report, studied the action of a meningococcus filtrate given intravenously or intraperitoneally to mice bearing mouse sarcoma 180. This material also produced severe and diffuse hemorrhages in the tumors. In a series of 40 tumor-bearing mice so treated, there were 9, or 22½ percent, with complete recession and 2 others died which were tumor-free at death. Shwartzman felt that some importance should be attached to this proportion of recoveries in the case of a tumor of the known growth energy of sarcoma 180.

The problem was further studied in 1933 by Duran-Reynals, who tested the action of a *B. coli* filtrate, given either intravenously or intraperitoneally, upon a variety of laboratory tumors in both rats and mice. As a result he classified his tumors into two groups; namely, those reacting positively and those reacting negatively to the injection. The positively reacting tumors were mouse sarcomas 37 and 180, the Walker rat sarcoma, mouse carcinoma 63, and the Twort mouse carcinoma. There were 169 mice and 34 rats in this group, a total of 203 animals. The group of negatively reacting tumors occurred in 69 rats and mice as follows: 19 mice with spontaneous mammary adenocarcinomas, 6 mice with the Hardy and Passey melanotic sarcoma, 4 mice bearing the transplantable Walker rat tumor, 10 rats bearing mouse sarcoma 37 or 180 (instances of heterologous transplantation), 20 mice with benign embryomas, and 10 mice with Kieselguhr granulomas. Complete recessions, in the first group, took place only in the mice bearing sarcomas 37 and 180. Duran-Reynals stresses that only those tumors showing both malignancy and rapid growth appeared to be affected by the injections.

Apitz made a study of hemorrhagic reactions produced by a *B. coli* filtrate, using the Ehrlich mouse carcinoma as the tumor. He found the hemorrhages to be located between an outer necrotic zone and an inner growth area around the base. He further noted that the tumor cells were affected with swelling and edema. Not only was Apitz able to produce these hemorrhages with a *B. coli* filtrate but also with agar solutions, antigen-antibody mixtures, and antihomo-

logous serum. It is of interest to note that the injection of a substance into tumor-bearing mice capable of producing a hemorrhagic diathesis (in this case, venom from the snake *Crotalus adamanteus*) did not cause hemorrhage in tumors. Apitz concluded that the cells were directly affected, as evidenced by the cellular swelling and edema.

EXPERIMENTAL

The experiments herewith reported resulted from a more or less fortuitous observation made while studying the liquefying properties, on the medium, of tumor cells of mouse sarcoma 180 grown in tissue culture. This work was often hampered by rapid and complete liquefaction of the tissue culture medium due to contamination with a small Gram-negative bacillus which made its appearance in the tissue cultures in spite of stringent aseptic technique. Investigation showed this organism, among others, to be saprophytic in a considerable proportion of the tumors propagated at this laboratory. (Thus in culture tests conducted on 97 tumors from which only pearly-white fragments aseptically removed were planted, the small Gram-negative bacillus was recovered from 56 tumors; 11 showed a small Gram-positive diplococcus and 2 showed *B. pyocyaneus*. Fragments from only 12 tumors yielded no growths.)

Impressed by the destructive effect upon the explant, which became rapidly opaque and necrotic on contamination of the tissue cultures with this bacillus, the experiment was made of injecting a small amount (0.2 cc) of the liquefied tissue culture medium containing the bacillus intravenously into mice bearing mouse sarcoma 180. Out of 67 mice so injected, 49, or 73 percent, died within a few hours as a result of the injection. In 14 mice the tumor was obviously affected, in 4 of which it completely receded.¹

This led to a further study and identification of the organism, which was found to correspond with *B. proteus vulgaris* in most of its morphological and cultural characteristics (a small Gram-negative motile bacillus, with spreading growth on solid media, rapidly liquefying gelatin, fermenting with gas in dextrose but not in lactose).

The next set of experiments had to do with the testing of the effect of a heated suspension of the bacilli on mice bearing sarcoma 180. In these experiments the bacilli obtained either by centrifugation from broth cultures or washed with physiological salt solution from agar slants or from the agar surface in Kolle flasks were heated in the water bath to various temperatures and injected in from 0.1- to 0.2-cc doses in the tail veins of the mice. The results of these experiments are set forth in table 1,

¹ In a recent paper Shwartzman has noted a similar effect in mice injected with living *B. enteritidis* organism.

TABLE 1.—Results of intravenous injection of vaccines into CR 180-bearing mice

Treatment		Number of mice	Complete recession	Tumors affected but not destroyed	Tumors not affected	Number of mice dying
Temperature °C.	Minutes					
60.....	30	96	12	33	4	47
60.....	60	10	0	10	0	0
55-58.....	60	52	11	12	11	18
70.....	60	13	6	3	0	4
75.....	30	85	21	12	4	48
98.....	15	19	4	6	2	7
96.....	30	25	6	7	0	12
Total.....		300	60	83	21	136
Percent.....			20	-28	7	45

It is evident from a consideration of this table that the heated suspension produced a number of complete recessions (20 percent) sufficient to encourage further work. Moreover, in an additional 28 percent the tumor was affected, although not destroyed. The suspension had considerable toxicity, for 136 mice, or 45 percent, succumbed to the injection, although normal mice were found to withstand a similar dosage with but little effect. In all of the experiments tabulated, each mouse was subjected to several injections in amounts of 0.1 to 0.2 cc. A larger initial dose produced a greater effect on the tumor, but the mouse nearly always succumbed. For subsequent injections, an interval of at least 3 to 4 days was required to secure an additional effect upon the tumor. This is reminiscent of the experience of Uhlenhuth, Haendel, and Steffenhagen, who, in treating rats bearing the Bashford rat sarcoma with pyocyanase, found that an interval of 8 days between injections was required to secure the optimum effect. This series of experiments showed further that the activity of the suspension was not destroyed by heating to 98° C. for 15 minutes, a fact previously noted by Beebe and Tracy, who found that the activity of their bacterial suspensions was not destroyed even by boiling.

In addition to mouse sarcoma 180 the effect of the bacterial suspensions was tested upon a few mice bearing sarcoma 37, carcinoma M63, spontaneous mammary cancer in the "Agouti" strain, transplantable spontaneous mammary cancer in the homologous strain, and upon sarcomas induced by the injection of 1:2:5:6-dibenzanthracene. The results of these experiments are summarized in table 2.

TABLE 2.—Summary of effect of heat-killed cultures on other tumors

Tumor	Number of mice	Complete recession	Affected but not destroyed	Not affected	Number of mice dying
S-37.....	45	7	8	1	9
M-63.....	42	4	12	7	19
Spontaneous Agouti.....	6	0	4	0	2
Spontaneous carcinoma (1st generation transplant).....	4	0	4	0	0
C ₆ H-DBA.....	9	0	4	0	5

The number of animals in this series is relatively low, 106 in all. In conformity with the experience of Duran-Reynals with the *B. coli* filtrate, the highest percentage of recessions was produced in sarcoma 37. It is worth noting that 4 complete recessions were produced in mice bearing carcinoma 63, although Duran-Reynals observed none in this variety of tumor. The toxic effect was most pronounced in the case of carcinoma 63. Though no spontaneous tumors in this small series were caused to recede, an effect was produced, as evidenced by inhibition of growth, decrease in size, and in one case hemorrhage followed by shrivelling, drying, and temporary arrest.

Means were sought to diminish the toxicity for tumor-bearing mice of the bacterial suspensions and thus to improve the results. An immune serum was made by injecting killed followed by living *proteus*-type organisms into two rabbits with the hope that this serum would protect mice from the toxic effects of the bacterial injection. By this method a serum of rather low agglutination titer (1:1000) was obtained. The rabbit serum was injected subcutaneously into the mice when they received the bacterial suspension. The results are summarized in table 3.

TABLE 3.—*Vaccine and serum treatment*

Tumor	Number of mice	Complete recession	Affected but not destroyed	Not affected	Number of mice dying
CR 180.....	84	26	32	6	20
Percent.....	-----	31	38	7	24

By the use of this serum, in the moderate number of mice used, the percentage of complete recessions was improved but the number of tumors in which complete recession could not be secured and the mortality from treatment were still high.

Attempts were next made to secure derivatives from the bacteria which would affect the tumors but would be less toxic to the mice. Some experiments were carried out with a product made by digesting the bacteria with trypsin, with a little chloroform or tricresol added as a preservative, and then filtering off the bacteria, either roughly through hard filter paper or with an N Berkefeld filter. The product was discarded after a few experiments because the tumors were much less affected than with the suspensions and the toxicity was high.

At the suggestion of Dr. L. D. Felton, of the Harvard Medical School, use was made of the alcohol-insoluble fraction of the bacteria. It had been previously noted by Beebe and Tracy that the active substance in bacterial products was present in alcohol-insoluble fractions. Also Shwartzman was able to evoke his reaction with the alcohol-insoluble fraction of *B. typhosus*.

The product used in these experiments was made in the following manner: A suspension of bacteria in physiological salt solution averaging 24 cc in volume was cytolized by the addition of 0.5 to 3 cc normal NaOH for times varying from 5 minutes to 1 hour. After centrifuging, the supernatant fluid was neutralized with HCl and 3 volumes of ethyl alcohol were added. As much of the resulting alcohol-insoluble precipitate as would dissolve in 0.9 percent NaCl solution was then used for injection. This method was used not only in the case of the *proteus*-type bacillus but also with respect to other organisms, the action of which had been tested by other workers either on tumors or in producing the Shwartzman reaction. Table 4 sets forth the results obtained with this type of preparation.

TABLE 4.—Effect of alcohol-insoluble precipitate on mice bearing sarcoma 180

Source of product.	Number of mice	Complete recessions	Tumors affected but not destroyed	Tumors not affected	Number of mice dying
<i>B. proteus</i>	323	100	85	5	33
<i>B. typhosus</i> (Rawling strain).....	137	81	16	0	40
<i>B. coli</i>	73	44	12	0	17
<i>B. pyocyaneus</i>	11	6	1	1	3
<i>B. prodigiosus</i>	15	5	9	0	1

It will be noted from the table that the results were considerably better from the standpoint of tumors which receded completely, those affected by the injection, and the mortality of the animals from the treatment. Thus, in a total of 559 mice there were 236 complete recessions, or 42 percent. The number of tumors affected but not brought to complete recession was 123, or 22 percent, while about one-third succumbed to the treatment. Autopsies of the mice which succumbed revealed that the tumors had been affected. In this table the alcohol-insoluble fraction from *B. coli* produced the best results, showing about 60 percent complete recessions in 73 tumor-bearing mice. There were no tumors which were not affected, but the mortality was high (23 percent).

GROSS AND MICROSCOPIC EFFECTS UPON TUMORS

The gross and microscopic effects of the injection upon the tumors are similar to those already described by Gratia and Linz, by Shwartzman, and by Apitz. The *B. proteus* type organism causes the same picture of discoloration of the tumor soon after injection, softening, shrivelling, and eventually the formation of a scab. If vital cells persist at the base of the tumor, a recurrence will take place. The cells become swollen, distorted, and progressively reveal the characteristics of necrosis.

EFFECTS IN VITRO OF BACTERIAL PRODUCTS

The effects, both of heated cultures and of the alcohol-insoluble precipitate from the *proteus* type of organism upon malignant tissues (mouse sarcoma 180), were tested by means of tissue cultures *in vitro*. These tests were carried out either in Carrel flasks or in depression slides. The general technique followed was a halving of both normal and malignant explants, one to be used for treatment and the other for control. For the depression slide the amount of heat-killed culture or the alcohol-insoluble precipitate added to the preparation tested was equal in amount to the quantity of growth-promoting substance (one drop of embryonic extract to 1 cc of Tyrode's solution) employed, e. g., one drop of each. The results obtained were definite. The addition of the bacterial product to the cultures had little effect upon the growth of normal tissue, but the growth of the malignant tissue was inhibited. Inhibition of growth of malignant cells was obtained only with the heat-killed cultures or with the alcohol-insoluble precipitate, filtrates of suspended live organisms having failed to affect the growth of tumor cells. The accompanying figures depict in diagrammatic fashion the effects observed. Figure 1 is chick heart growing in mouse plasma with chick embryonic juice. The darkened area is the original explant; the light area in the surrounding line depicts the growth which has taken place. Figure 2 is mouse sarcoma 180 in the same medium. The outer line indicates, as in figure 1, the amount of growth; but this area includes an inner bordered area that represents the area of liquefaction in which no vital cells are found. Figure 3 shows both mouse heart and tumor growing in the same culture medium. Figure 4 also shows both mouse heart and tumor in the same culture medium. A loopful of filtrate from the *proteus*-type organism had been added. Growth of neither tissue has been inhibited. Figure 5 is chick heart and mouse tumor in the same medium. A loopful of heat-killed culture has been added. The heart tissue has grown, but the tumor tissue has been inhibited. Figures 6, 7, and 8 show chick heart and mouse tumor in the same medium treated with a loopful of Arnold-treated, autoclaved agar washings and the extracted products of *B. proteus*, respectively. The heart shows normal growth, while the tumor shows none. Figure 9 shows mouse heart and tumor in the same medium with no growth from either explant when the cultures are infected with the living *B. proteus* organism.

DISCUSSION

It is evident that the type of reaction produced upon the transplantable mouse tumors by both the killed organism and the alcohol-insoluble precipitate derived therefrom is similar to that

already reported by Gratia and Linz with the *B. coli* filtrate on the transplantable liposarcoma of guinea pigs, by Schwartzman and Michailovsky upon CR 180 with the meningococcus filtrate, and by Duran-Reynals upon a variety of laboratory tumors also with a *B. coli* filtrate. The typical hemorrhagic action within the tumor accompanied by edema and destruction of the cell, as described by

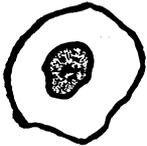


Fig. 1

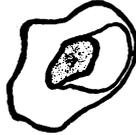


Fig. 2

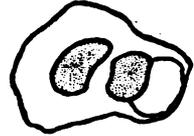


Fig. 3

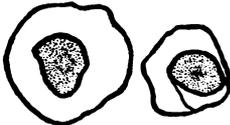


Fig. 4

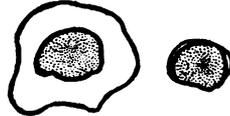


Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Diagrams showing the effects in vitro of bacterial products upon malignant tissues.

Apitz and others, is also brought about by the use of a *proteus*-type organism. Apitz was able to produce the same reactions with agar solutions, antigen-antibody mixtures, and with antihomologous serum. The property of reacting to the injection of a bacterial product in the manner described is obviously not a general characteristic of tumors. Duran-Reynals concluded from his work upon a variety of mouse and rat tumors, both spontaneous and transplant-

able, that the rapidly growing transplantable tumors were the most susceptible. The present work would confirm that observation with the use of the *proteus*-type organism.

SUMMARY

The heat-killed cultures or the alcohol-insoluble fraction from a gram-negative bacillus belonging to the *proteus* group, upon injection into mice bearing transplantable sarcomas, causes a hemorrhagic reaction followed by destruction of tumor cells frequently resulting in complete recession of the tumors. A similar effect is observed by injection of the alcohol-insoluble fraction of *B. typhosus* and *B. coli*. The reaction is similar to that reported by other workers (Gratia and Linz, Shwartzman, Apitz, and others) with the use of bacterial filtrates. The alcohol-insoluble fraction from *B. proteus* also inhibits the growth of sarcoma 180 in tissue cultures, but has little effect upon the normal cells used as controls.

ACKNOWLEDGMENT

Acknowledgment is here made, with thanks, for the technical assistance and cooperation of Senior Medical Technician Theresa Shovelton.

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DEATHS DURING WEEK ENDED DEC. 28, 1935

[From the Weekly Health Index issued by the Bureau of the Census, Department of Commerce]

	Week ended Dec. 28, 1935	Correspond- ing week, 1934
Data from 86 large cities of the United States:		
Total deaths.....	8,900	9,180
Deaths per 1,000 population, annual basis.....	12.5	12.8
Deaths under 1 year of age.....	509	580
Deaths under 1 year of age per 1,000 estimated live births.....	47	54
Deaths per 1,000 population, annual basis, 52 weeks of year.....	11.4	11.4
Data from industrial insurance companies:		
Policies in force.....	67,841,506	67,078,445
Number of death claims.....	10,593	11,184
Death claims per 1,000 policies in force, annual rate.....	8.1	8.7
Death claims per 1,000 policies, 52 weeks of year, annual rate.....	9.5	9.8

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended Jan. 4, 1936, and Jan. 5, 1935

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 4, 1936, and Jan. 5, 1935

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935
New England States:								
Maine.....	5	4	1	18	181	42	0	0
New Hampshire.....		2		1	2	24	0	0
Vermont.....		4			203		0	0
Massachusetts.....	13	11			241	195	1	1
Rhode Island.....		2		1	135	11	1	0
Connecticut.....	1	4	31	236	93	433	2	1
Middle Atlantic States:								
New York.....	42	36	121	147	543	671	12	5
New Jersey.....	14	23	9	338	12	39	3	1
Pennsylvania.....	68	76			283	1,334	3	4
East North Central States:								
Ohio.....	51	64	8	11	79	377	2	7
Indiana.....	40	39	40	183	4	353	3	0
Illinois.....	67	57	20	158	36	1,661	9	12
Michigan.....	20	4	3		22	45	3	0
Wisconsin.....	2	7	44	42	63	448	2	1
West North Central States:								
Minnesota.....	5	5		1	66	375	0	2
Iowa.....	11	8	1	30	5	810	6	0
Missouri.....	27	62	150	192	13	161	5	0
North Dakota.....	2	6	2	319	2	152	0	1
South Dakota.....				1	4	19	0	0
Nebraska.....	5	9			43	94	0	0
Kansas.....	13	8	7	13	7	378	0	3
South Atlantic States:								
Delaware.....	1	5		6	85	7	1	0
Maryland ¹	7	9	37	420	72	26	8	0
District of Columbia.....	18	3	4	25	5	10	2	0
Virginia.....	25	34			16	252	4	4
West Virginia.....	14	27	139	143	1	362	3	2
North Carolina.....	22	27	16	409	3	604	4	4
South Carolina.....	1	5	239	2,000	1	12	1	0
Georgia ¹	10	11	135	481			3	0
Florida.....	13	3	5	30	1	19	0	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 4, 1936, and Jan. 5, 1935—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935
East South Central States:								
Kentucky.....	19	36	13	209	46	438	7	1
Tennessee.....	17	12	81	251	6	11	9	2
Alabama ¹	18	23	213	510	19	155	3	2
Mississippi ^{1,2}	12	16					2	0
West South Central States:								
Arkansas.....	19	12	87	37	5	2	2	1
Louisiana.....	10	34	20	9	21	29	1	1
Oklahoma ⁴	16	12	77	119	4	4	7	2
Texas.....	21	76	155	423	2	88	3	1
Mountain States:								
Montana.....	1	5	41	14	17	88	1	6
Idaho.....	4			1	11	3	0	0
Wyoming.....	2				2	7	2	0
Colorado.....	9	5		0	5	396	3	1
New Mexico.....	1	4	2	11		19	1	1
Arizona.....	10		91	116	3	14	0	1
Utah ¹		1		2	1	10	0	0
Pacific States:								
Washington.....	1	2			79	44	1	0
Oregon.....	3	6	32	71	345	15	2	0
California.....	40	45	62	87	422	85	8	1
Total.....	700	843	1,786	6,965	3,209	10,322	130	68

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935
New England States:								
Maine.....	1	0	19	23	0	0	0	0
New Hampshire.....	0	0	13	3	0	0	0	0
Vermont.....	0	0	11	27	0	0	0	0
Massachusetts.....	1	3	234	146	0	0	2	3
Rhode Island.....	0	0	25	10	0	0	0	0
Connecticut.....	0	1	40	51	0	0	2	1
Middle Atlantic States:								
New York.....	4	1	620	444	0	0	4	13
New Jersey.....	2	2	121	100	0	0	0	2
Pennsylvania.....	0	2	528	643	0	0	9	35
East North Central States:								
Ohio.....	0	0	378	656	1	0	2	7
Indiana.....	1	0	273	175	7	4	0	2
Illinois.....	0	0	521	655	5	2	4	10
Michigan.....	1	0	194	98	0	0	1	3
Wisconsin.....	0	0	417	338	16	9	0	2
West North Central States:								
Minnesota.....	0	0	320	97	2	5	2	1
Iowa.....	3	1	113	53	1	4	0	2
Missouri.....	0	0	148	91	7	0	0	12
North Dakota.....	0	1	33	20	2	5	1	0
South Dakota.....	0	0	52	45	5	3	1	0
Nebraska.....	0	1	151	49	23	6	0	3
Kansas.....	1	0	143	111	11	2	0	1
South Atlantic States:								
Delaware.....	0	0	12	37	0	0	1	0
Maryland ¹	0	0	64	105	0	0	2	1
District of Columbia.....	0	0	18	26	0	0	1	6
Virginia.....	0	0	45	72	0	2	12	9
West Virginia.....	0	0	64	130	0	12	0	10
North Carolina.....	0	0	29	59	1	0	2	5
South Carolina.....	0	0	12	9	0	4	2	0
Georgia ¹	0	0	15	7	0	0	4	3
Florida.....	0	0	12	8	0	0	0	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 4, 1936, and Jan. 5, 1935—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935	Week ended Jan. 4, 1936	Week ended Jan. 5, 1935
East South Central States:								
Kentucky.....	1	0	57	99	0	1	5	13
Tennessee.....	0	0	42	34	0	0	3	2
Alabama ¹	0	1	11	19	0	8	1	2
Mississippi ^{1,2}	0	0	17	13	0	0	0	3
West South Central States:								
Arkansas.....	0	0	33	1	0	7	9	2
Louisiana.....	0	2	15	41	0	2	7	11
Oklahoma ⁴	1	0	33	125	0	0	1	6
Texas.....	0	0	51	65	3	2	0	25
Mountain States:								
Montana.....	0	1	193	35	34	1	0	0
Idaho.....	0	0	33	1	0	0	0	1
Wyoming.....	0	0	229	13	4	10	0	0
Colorado.....	0	0	141	185	31	1	1	0
New Mexico.....	0	0	53	10	0	0	9	2
Arizona.....	0	0	15	17	0	0	0	1
Utah ¹	0	0	80	61	0	1	0	0
Pacific States:								
Washington.....	0	0	78	49	6	64	2	0
Oregon.....	0	0	51	51	0	2	1	1
California.....	5	13	284	193	4	18	8	8
Total.....	21	29	6,041	5,300	163	175	99	208

¹ New York City only.

² Week ended earlier than Saturday.

³ Typhus fever, week ended Jan. 4, 1936, 8 cases, as follows: Georgia, 1; Alabama, 2; Mississippi, 5.

⁴ Exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Mala- ria	Mea- sles	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<i>October 1935</i>										
Colorado.....	2	54			17		3	440	13	21
<i>November 1935</i>										
Arizona.....	4	27	173		8	3	5	136	0	6
Colorado.....	6	50			24		3	500	47	5
Hawaii Territory.....	1		2,578		3		0	1	0	4
Mississippi.....	3	54	3,580	3,221	32	187	3	130	2	34
Nevada.....			13		134		0	12	0	0
Rhode Island.....		2			69		13	52	0	0
<i>December 1935</i>										
Arkansas.....	9	57	221	76	8	30	3	68	1	22
Delaware.....		3			291		0	50	0	3
Indiana.....	17	206	142		53		1	912	13	13

Summary of monthly reports from States—Continued

October 1935		November 1935—Continued		December 1935	
Colorado:	Cases	Mumps:	Cases	Chicken pox:	Cases
Chicken pox.....	118	Arizona.....	199	Arkansas.....	139
Impetigo contagiosa.....	11	Colorado.....	203	Delaware.....	85
Mumps.....	71	Hawaii Territory.....	20	Indiana.....	492
Septic sore throat.....	6	Mississippi.....	316	Epidemic encephalitis:	
Vincent's infection.....	1	Nevada.....	12	Indiana.....	1
Whooping cough.....	34	Rhode Island.....	86	German measles:	
		Puerperal septicemia:		Delaware.....	1
		Mississippi.....	19	Mumps:	
		Rabies in animals:		Arkansas.....	279
		Mississippi.....	16	Delaware.....	13
November 1935		Septic sore throat:		Indiana.....	163
Chicken pox:		Arizona.....	5	Rabies in animals:	
Arizona.....	81	Trachoma:		Indiana.....	37
Colorado.....	395	Arizona.....	54	Septic sore throat:	
Hawaii.....	34	Colorado.....	1	Indiana.....	6
Mississippi.....	287	Mississippi.....	3	Trachoma:	
Nevada.....	6	Typhus fever:		Arkansas.....	2
Rhode Island.....	34	Hawaii Territory.....	1	Tularaemia:	
Dysentery:		Undulant fever:		Arkansas.....	1
Arizona.....	11	Arizona.....	2	Indiana.....	2
Mississippi (amoebic).....	93	Colorado.....	1	Undulant fever:	
German measles:		Whooping cough:		Arkansas.....	2
Arizona.....	23	Arizona.....	6	Whooping cough:	
Rhode Island.....	2	Colorado.....	60	Arkansas.....	22
Hookworm disease:		Hawaii Territory.....	31	Delaware.....	30
Mississippi.....	242	Mississippi.....	303	Indiana.....	185
Impetigo contagiosa:		Rhode Island.....	31		
Colorado.....	31				
Leprosy:					
Hawaii Territory.....	2				

WEEKLY REPORTS FROM CITIES

City reports for week ended Dec. 28, 1935

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland.....	0	1	0	0	3	2	0	0	0	9	25
New Hampshire:											
Concord.....	0	0	0	0	1	3	0	0	0	4	19
Manchester.....	0	0	0	1	1	2	0	0	0	0	9
Nashua.....	0	0	0	0	0	0	0	0	0	0	0
Vermont:											
Barre.....	0	0	0	0	0	0	0	0	0	0	4
Burlington.....	0	0	0	0	0	0	0	0	0	0	7
Rutland.....	0	0	2	0	0	1	0	0	0	0	7
Massachusetts:											
Boston.....	1	0	35	30	67	0	6	3	3	3	236
Fall River.....	4	0	0	3	1	0	0	0	0	0	31
Springfield.....	0	0	0	3	2	0	1	0	6	6	33
Worcester.....	0	0	0	6	15	0	1	0	6	6	52
Rhode Island:											
Pawtucket.....	0	0	0	0	2	0	0	0	0	0	18
Providence.....	0	0	6	10	6	0	2	0	6	6	67
Connecticut:											
Bridgeport.....	0	6	0	1	5	3	0	1	0	2	38
Hartford.....	0	0	1	4	3	0	1	0	10	57	57
New Haven.....	0	0	0	4	1	0	1	0	4	4	33
New York:											
Buffalo.....	2	2	7	9	47	0	3	0	15	15	139
New York.....	32	19	11	100	148	190	0	89	9	60	1,582
Rochester.....	1	0	1	6	1	0	0	0	6	6	75
Syracuse.....	0	1	1	2	3	0	1	0	22	60	60
New Jersey:											
Camden.....	2	1	0	6	2	0	2	0	6	6	32
Newark.....	1	0	1	9	45	0	3	1	15	94	94
Trenton.....	0	0	0	2	2	0	0	0	1	1	35
Pennsylvania:											
Philadelphia.....	8	1	80	33	67	0	22	2	57	57	489
Pittsburgh.....	4	5	4	15	26	42	0	4	0	5	168
Reading.....	0	0	0	3	4	0	2	0	0	0	47
Scranton.....	0	0	0	0	4	0	0	0	0	0	0

City reports for week ended Dec. 28, 1935—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Ohio:											
Cincinnati.....	6	-----	1	2	16	10	0	7	0	0	147
Cleveland.....	2	33	4	11	20	17	0	11	0	18	194
Columbus.....	2	-----	0	0	12	12	0	1	0	1	91
Toledo.....	0	1	1	12	3	8	0	1	0	11	62
Indiana:											
Anderson.....	0	-----	0	0	1	0	1	0	0	2	9
Fort Wayne.....	6	-----	0	0	2	3	0	0	0	0	28
Indianapolis.....	2	-----	0	0	16	6	0	6	0	2	118
Muncie.....	0	-----	1	1	1	2	0	1	0	0	14
South Bend.....	1	-----	0	0	1	3	0	1	1	0	17
Terre Haute.....	0	-----	0	0	0	0	0	0	0	0	18
Illinois:											
Alton.....	0	-----	0	0	0	4	0	1	0	0	9
Chicago.....	12	7	5	5	72	185	1	24	1	115	728
Elgin.....	0	-----	0	0	5	0	0	0	0	0	14
Moline.....	0	-----	1	0	0	5	0	0	0	0	9
Springfield.....	1	-----	0	0	4	11	0	0	0	1	34
Michigan:											
Detroit.....	8	3	3	1	30	54	0	13	1	56	270
Flint.....	2	-----	0	0	6	8	0	1	0	0	40
Grand Rapids.....	0	-----	0	3	3	18	0	0	0	2	37
Wisconsin:											
Kenosha.....	0	-----	0	0	1	3	0	0	0	3	9
Milwaukee.....	0	-----	0	4	8	44	0	0	0	85	88
Racine.....	0	-----	0	.3	1	21	0	1	0	5	12
Superior.....	0	-----	0	0	0	0	0	0	0	0	13
Minnesota:											
Duluth.....	0	-----	0	0	0	2	0	1	0	2	17
Minneapolis.....	0	-----	0	14	6	86	0	2	0	2	102
St. Paul.....	0	-----	0	6	10	24	0	1	0	1	63
Iowa:											
Cedar Rapids.....	0	-----	-----	0	-----	1	0	-----	0	0	-----
Davenport.....	0	-----	-----	0	-----	6	0	-----	0	0	-----
Des Moines.....	1	-----	-----	1	-----	5	1	-----	0	1	37
Sioux City.....	0	-----	-----	1	-----	7	1	-----	0	0	-----
Waterloo.....	6	-----	-----	0	-----	0	0	-----	0	1	-----
Missouri:											
Kansas City.....	1	-----	2	0	13	10	0	1	1	0	103
St. Joseph.....	2	-----	2	1	4	2	0	0	0	0	33
St. Louis.....	14	-----	1	2	20	29	0	4	0	4	248
North Dakota:											
Fargo.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Grand Forks.....	0	-----	-----	0	-----	0	0	-----	0	0	-----
Minot.....	0	-----	-----	0	-----	5	0	-----	0	0	-----
South Dakota:											
Aberdeen.....	0	-----	-----	0	-----	0	0	-----	0	0	-----
Nebraska:											
Omaha.....	0	-----	0	3	7	94	2	4	0	0	68
Kansas:											
Lawrence.....	0	-----	0	0	0	0	0	0	0	0	2
Topeka.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Wichita.....	0	1	1	0	3	10	0	0	0	0	33
Delaware:											
Wilmington.....	1	-----	0	0	3	1	0	1	0	3	22
Maryland:											
Baltimore.....	4	2	2	2	20	32	0	7	5	12	217
Cumberland.....	1	-----	0	0	1	1	0	0	0	0	19
Frederick.....	0	-----	0	0	0	0	0	0	0	0	5
District of Col.:											
Washington.....	17	-----	0	0	18	14	0	14	0	1	164
Virginia:											
Lynchburg.....	0	-----	0	2	0	2	0	0	0	4	11
Norfolk.....	1	-----	0	0	3	4	0	4	0	0	36
Richmond.....	0	-----	1	0	6	1	0	2	0	0	60
Roanoke.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
West Virginia:											
Charleston.....	0	1	1	1	2	3	0	0	0	0	21
Huntington.....	1	-----	-----	0	-----	6	0	0	0	0	-----
Wheeling.....	1	-----	0	0	3	2	0	0	0	0	28
North Carolina:											
Gastonia.....	0	-----	0	0	1	0	0	0	0	0	3
Raleigh.....	0	-----	0	0	2	0	0	1	0	0	11
Wilmington.....	0	-----	0	0	2	0	0	0	0	7	13
Winston-Salem.....	0	-----	0	0	1	1	0	0	0	0	10

City reports for week ended Dec. 28, 1935—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
South Carolina:											
Charleston.....	1	13	2	0	5	6	0	0	0	2	21
Columbia.....	0	0	0	0	1	0	0	0	0	0	7
Florence.....	0	0	0	2	1	0	0	0	0	0	7
Greenville.....	0	0	0	0	0	0	0	0	0	0	0
Georgia:											
Atlanta.....	7	34	4	0	13	8	0	2	0	0	97
Brunswick.....	0	0	0	0	0	1	0	0	0	0	6
Savannah.....	3	47	5	0	9	4	0	4	0	2	56
Florida:											
Miami.....	1	0	0	1	1	1	0	2	0	0	37
St. Petersburg.....	0	0	0	0	0	0	0	0	0	0	0
Tampa.....	0	0	0	0	0	0	0	0	0	0	0
Kentucky:											
Ashland.....	0	0	0	0	0	0	0	0	0	0	0
Covington.....	1	0	0	0	3	5	0	0	0	0	15
Lexington.....	1	0	0	0	2	0	0	1	0	0	23
Louisville.....	2	2	0	0	13	5	0	9	0	3	111
Tennessee:											
Knoxville.....	2	13	1	0	7	0	0	0	0	0	33
Memphis.....	1	0	0	0	17	13	0	6	0	0	77
Nashville.....	0	0	3	0	16	0	0	1	0	0	63
Alabama:											
Birmingham.....	1	5	4	1	13	3	0	5	0	0	77
Mobile.....	0	0	0	0	6	0	0	0	0	0	24
Montgomery.....	0	7	0	0	0	0	0	0	0	0	0
Arkansas:											
Fort Smith.....	1	0	0	0	0	0	0	0	0	0	0
Little Rock.....	0	0	1	0	3	3	0	1	0	0	0
Louisiana:											
Lake Charles.....	2	0	0	0	0	0	0	0	1	0	5
New Orleans.....	8	8	1	6	23	5	0	11	0	6	202
Shreveport.....	1	0	0	0	7	0	0	2	0	0	39
Oklahoma:											
Oklahoma City.....	0	10	0	0	3	4	0	0	0	0	42
Texas:											
Dallas.....	7	0	0	0	14	6	0	3	1	0	66
Fort Worth.....	2	1	0	0	4	6	0	1	0	0	43
Galveston.....	2	0	0	0	2	0	0	1	0	0	21
Houston.....	4	2	0	0	12	5	0	6	1	0	94
San Antonio.....	1	2	0	0	7	0	0	3	0	0	52
Montana:											
Billings.....	0	0	0	0	3	14	0	0	0	1	14
Great Falls.....	0	0	0	0	2	3	1	0	0	2	10
Helena.....	0	0	0	0	0	3	0	0	0	0	4
Missoula.....	0	0	0	0	1	8	0	0	0	0	3
Idaho:											
Boise.....	0	0	0	4	1	1	0	0	0	0	5
Colorado:											
Colorado Springs.....	0	1	0	0	5	10	0	1	0	0	24
Denver.....	4	1	7	9	24	0	3	0	0	1	106
Pueblo.....	0	0	0	2	19	0	0	0	0	0	13
New Mexico:											
Albuquerque.....	0	0	3	1	1	21	0	3	0	2	17
Utah:											
Salt Lake City.....	1	0	1	2	4	50	0	0	0	3	46
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	0	0	0
Washington:											
Seattle.....	0	0	2	10	4	25	6	3	0	2	97
Spokane.....	0	0	0	6	4	2	0	0	0	0	31
Tacoma.....	0	0	0	2	2	2	0	0	0	2	27
Oregon:											
Portland.....	0	0	1	54	7	13	0	3	0	2	86
Salem.....	0	1	0	0	0	1	0	0	0	0	0
California:											
Los Angeles.....	11	26	3	24	25	30	0	21	1	20	329
Sacramento.....	0	0	0	2	1	21	0	1	2	3	24
San Francisco.....	0	0	2	70	11	28	0	10	0	14	199

City reports for week ended Dec. 28, 1935—Continued

State and city	Meningococcus meningitis		Polio- mye- litis cases	State and city	Meningococcus meningitis		Polio- mye- litis cases
	Cases	Deaths			Cases	Deaths	
Maine:				Iowa:			
Portland.....	0	0	1	Davenport.....	0	0	1
Massachusetts:				Missouri:			
Boston.....	0	1	1	Kansas City.....	1	1	0
Worcester.....	1	2	0	St. Joseph.....	0	1	0
Rhode Island:				Kansas:			
Providence.....	1	0	1	Wichita.....	1	1	0
New York:				Maryland:			
New York.....	5	7	1	Baltimore.....	3	1	0
New Jersey:				District of Columbia:			
Newark.....	0	0	1	Washington.....	4	3	0
Pennsylvania:				Virginia:			
Philadelphia.....	7	0	0	Lynchburg.....	1	1	0
Ohio:				North Carolina:			
Cincinnati.....	1	0	0	Wilmington.....	0	1	0
Cleveland.....	1	0	0	Georgia:			
Indiana:				Atlanta.....	2	0	0
Indianapolis.....	1	1	0	Kentucky:			
Muncie.....	1	0	0	Louisville.....	0	1	0
South Bend.....	1	1	0	Tennessee:			
Illinois:				Memphis.....	1	2	0
Chicago.....	9	4	0	Arkansas:			
Moline.....	1	0	0	Little Rock.....	1	0	0
Michigan:				Louisiana:			
Detroit.....	3	2	0	New Orleans.....	1	1	0
Flint.....	1	1	0	Colorado:			
Minnesota:				Colorado Springs.....	0	1	0
Minneapolis.....	1	0	0	California:			
				Los Angeles.....	1	2	0

Epidemic encephalitis.—Cases: Cleveland, 1; Norfolk, 1; San Francisco, 1.

Pellagra.—Cases: Boston, 1; Philadelphia, 1; Atlanta, 1; Savannah, 1; Birmingham, 1; New Orleans, 1; San Francisco, 1.

Typhus fever: Cases: Atlanta, 1; Mobile, 1. Deaths: Mobile, 1.

FOREIGN AND INSULAR

CANADA

Vital statistics—Second quarter 1935.—The Bureau of Statistics of the Dominion of Canada has published the following preliminary statistics for the second quarter of 1935. The rates are computed on an annual basis. There were 20.9 live births per 1,000 population during the second quarter of 1935 and 21.2 per 1,000 population in the same quarter of 1934. The death rate was 9.9 per 1,000 population for the second quarter of 1935 and 9.6 per 1,000 population for the second quarter of 1934. The infant mortality rate for the second quarter of 1935 was 72 per 1,000 live births and 70 in the corresponding quarter of 1934. The maternal death rate was 5.1 per 1,000 live births for the second quarter of 1935, and 5.5 for the same quarter of 1934.

The accompanying tables give the number of births, deaths, and marriages by Provinces for the second quarter of 1935, and deaths from certain causes in Canada for the second quarter of 1935, and the corresponding quarter of 1934, and by Provinces for the second quarter of 1935.

Number of births, deaths, and marriages, second quarter 1935

Province	Live births	Deaths (exclusive of still-births)	Deaths under 1 year of age	Maternal deaths	Marriages
Canada ¹	57, 103	27, 060	4, 122	293	19, 004
Prince Edward Island.....	489	253	36	2	82
Nova Scotia.....	3, 057	1, 624	228	12	843
New Brunswick.....	2, 722	1, 161	191	17	681
Quebec.....	20, 059	8, 596	1, 906	110	5, 396
Ontario.....	16, 478	9, 412	936	84	7, 355
Manitoba.....	3, 405	1, 441	212	19	1, 245
Saskatchewan.....	4, 816	1, 619	307	19	1, 131
Alberta.....	3, 567	1, 290	213	19	1, 045
British Columbia.....	2, 510	1, 664	93	11	1, 226

¹ Exclusive of Yukon and the Northwest Territories.

Number of births, deaths, and marriages second quarter 1935—Continued

Cause of death	Canada ¹ (second quarter)		Province, second quarter, 1935								
	1934	1935	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Automobile accidents.....	242	238		12	8	59	107	9	11	10	22
Cancer.....	2,576	2,843	20	158	127	716	1,078	199	171	143	226
Diarrhea and enteritis.....	564	505	4	14	14	319	77	26	24	18	9
Diphtheria.....	41	50		2	3	25	7	3	5	1	4
Diseases of the arteries.....	1,861	2,105	14	124	80	379	1,082	120	82	99	125
Diseases of the heart.....	4,166	4,080	44	212	130	938	1,812	207	241	193	303
Homicides.....	30	47		2	1	7	19	5	4	5	4
Influenza.....	526	944	14	64	43	440	228	24	49	45	37
Measles.....	54	172		6	4	93	42	11	10	3	3
Nephritis.....	1,506	1,628	16	88	50	718	502	48	71	42	93
Pneumonia.....	1,822	2,072	21	132	112	657	711	117	116	81	95
Poliomyelitis.....	13	17			1	7	2	4	2	1	
Puerperal causes.....	313	293	2	12	17	110	84	19	19	19	11
Scarlet fever.....	55	60		4	3	38	10	1	1	2	1
Suicides.....	250	220	1	10	3	40	86	15	28	13	24
Tuberculosis.....	1,947	1,815	20	121	92	824	378	123	66	50	138
Typhoid fever and paratyphoid fever.....	58	53			2	37	4	4	4	1	1
Other violent deaths.....	1,067	1,067	4	71	45	265	379	57	69	70	107

¹ Exclusive of Yukon and the Northwest Territories.

CUBA

Provinces—Notifiable diseases—4 weeks ended December 14, 1935.—

During the 4 weeks ended December 14, 1935, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....				7	2	3	12
Chicken pox.....						1	1
Diphtheria.....		1	1	3	4		9
Hookworm disease.....				1			1
Leprosy.....		1			3	14	18
Malaria.....	89	269	157	245	669	556	1,965
Measles.....					1	1	2
Poliomyelitis.....	2			7		3	12
Scarlet fever.....				1			1
Tuberculosis.....	5	9	10	19	13	38	94
Typhoid fever.....	1	80	3	20	38	22	164

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for December 27, 1935, pages 1834-1848. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued January 31, 1936, and thereafter, at least for the time being, in the issue published on the last Friday of each month.

Plague

Argentina—Cordoba Province—Rafael Garcia.—During the month of December 1935, 5 cases of plague with 3 deaths were reported in Rafael Garcia, Cordoba Province, Argentina.

China—Manchuria.—A report dated November 27, 1935, states that 23 deaths from plague have occurred in the vicinity of Koshan, Manchuria. An unofficial report also states that 15 cases of plague had occurred in Harbin, Manchuria.

Union of Soviet Socialist Republics.—For the purpose of sanitary protection, the Government of the Union of Soviet Socialist Republics has decreed that the border between it and Manchuria along the Amur River shall be closed on the Sector Kumar-Pashkovo on account of cases of a disease suspected of being plague.

Yellow Fever

Brazil.—Yellow fever has been reported in Brazil as follows: During the week ended December 28, 1935, 1 case with 1 death at Esplanada, Bahia State, and during the week ended December 21, 1935, 2 cases with 2 deaths at Passos, Minas Geraes State, and 2 cases with 2 deaths at Mattao, Sao Paulo State, Brazil.

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